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NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	5	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	6	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	7	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	8	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS	9	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS	10	SEP 22	DIPPR file reloaded
NEWS	11	DEC 08	INPADOC: Legal Status data reloaded
NEWS	12	SEP 29	DISSABS now available on STN
NEWS	13	OCT 10	PCTFULL: Two new display fields added
NEWS	14	OCT 21	BIOSIS file reloaded and enhanced
NEWS	15	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS	16	NOV 24	MSDS-CCOHS file reloaded
NEWS	17	DEC 08	CABA reloaded with left truncation
NEWS	18	DEC 08	IMS file names changed
NEWS	19	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS	20	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAPLUS
NEWS	21	DEC 17	DGENE: Two new display fields added
NEWS	22	DEC 18	BIOTECHNO no longer updated
NEWS	23	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS EXPRESS	NOVEMBER 14	CURRENT WINDOWS VERSION IS V6.01c, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003	
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=> s dimer (s) fusion (s) steroid (s) receptor  
L1 9 DIMER (S) FUSION (S) STEROID (S) RECEPTOR

=> dup rem l1  
PROCESSING COMPLETED FOR L1  
L2 6 DUP REM L1 (3 DUPLICATES REMOVED)

=> d l2 total ibib kwic

L2 ANSWER 1 OF 6 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2000043997 EMBASE  
TITLE: Interactions of the nuclear matrix-associated steroid  
receptor binding factor with its DNA binding element in the  
c-myc gene promoter.

AUTHOR: Barrett T.J.; Sandhu N.P.; Tomlinson A.J.; Benson L.M.;  
Subramaniam M.; Naylor S.; Spelsberg T.C.

CORPORATE SOURCE: T.C. Spelsberg, Dept. of Biochemistry/Molec. Biol., Mayo  
Clinic, 200 First Street, S.W., Rochester, MN 55905, United  
States. Spelsberg.thomas@mayo.edu

SOURCE: Biochemistry, (1 Feb 2000) 39/4 (753-762).  
Refs: 76

ISSN: 0006-2960 CODEN: BICHAW

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 022 Human Genetics

029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Steroid receptor binding factor (RBF) was originally  
isolated from avian oviduct nuclear matrix. When bound to avian genomic  
DNA, RBF generates saturable high-affinity binding sites for the avian  
progesterone receptor (PR). Recent studies have shown that RBF  
binds to a 54 bp element in the 5'-flanking region of the . . . paper,  
electrophoretic mobility shift assays (EMSAs) and S1 nuclease treatment  
are used to demonstrate that the RBF-maltose binding protein (MBP)  
fusion protein binds to single-stranded DNA of its element. Only  
the N-terminal domain of RBF binds the RBF DNA element as . . . support  
that the nuclear matrix binding site (acceptor site) for PR in the c-myc  
gene promoter is composed of RBF dimers bound to a specific  
single-stranded DNA element. The dimers of RBF are generated by  
C-terminal leucine zipper and the DNA binding occurs at the N-terminal  
parallel .beta.-sheet DNA. . .

L2 ANSWER 2 OF 6 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 1998336916 EMBASE

TITLE: Studies of dehydroepiandrosterone (DHEA) with the human estrogen receptor in yeast.

AUTHOR: Nephew K.P.; Sheeler C.Q.; Dudley M.D.; Gordon S.; Nayfield S.G.; Khan S.A.

CORPORATE SOURCE: K.P. Nephew, Medical Sciences Program, Indiana University School Medicine, 302 Jordon Hall, Bloomington, IN 47405-4401, United States. knephew@indiana.edu

SOURCE: Molecular and Cellular Endocrinology, (25 Aug 1998) 143/1-2 (133-142).  
Refs: 72  
ISSN: 0303-7207 CODEN: MCEND6  
S 0303-7207(98)00128-2

PUBLISHER IDENT.: S 0303-7207(98)00128-2

COUNTRY: Ireland

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 003 Endocrinology  
029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Dehydroepiandrosterone (DHEA) is a C19 adrenal steroid synthesized in the human adrenal cortex and serving as a biosynthetic precursor to testosterone and 17.beta.-estradiol. Despite the fact that it is one of the most abundant steroid hormones in circulation, the physiological role of DHEA in humans remains unclear. The action of DHEA itself, such as its interactions with receptors and nuclear transcription factors, is not well understood, and a specific DHEA receptor has yet to be identified. Although the activity of DHEA can be due to its metabolism into androgens and estrogens, DHEA has been shown to interact with the androgen receptor and the estrogen receptor (ER) in vitro. We demonstrate in this study that DHEA (3.beta.-Hydroxy-5.alpha.-androstane-17-one) inhibits 17.beta.-estradiol (E2) binding to its receptor in vivo in yeast. DHEA stimulates human ER dimerization in yeast, as determined by ER fusion protein interactions, GAL4 reconstitution and subsequent measurement of increased .beta.-galactosidase activity. DHEA causes an increase in estrogen response element-dependent .beta.-galactosidase activity, demonstrating that the ER dimer induced by DHEA is transcriptionally active, but at a concentration of DHEA about 1000 times greater than E2. Inclusion of the nuclear receptor co-activator RIP140 in the yeast enhances ER transactivation by DHEA or E2 in a ligand-dependent manner; moreover, only in the presence of RIP140 is DHEA able to stimulate .beta.-galactosidase activity to levels similar to those achieved by E2. Ligand-receptor interaction for other C19-steroids was also examined. While 5-androstene-3.beta., 17.beta.-diol (ADIOH) displayed estrogenic activity in this system, 4-androstene-17-dione (androstenedione) and 4-androstene-17.beta.-ol,3-one (testosterone) did not. . . .

L2 ANSWER 3 OF 6 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 1998079032 MEDLINE

DOCUMENT NUMBER: 98079032 PubMed ID: 9417052

TITLE: Intermolecular NH2-/carboxyl-terminal interactions in androgen receptor dimerization revealed by mutations that cause androgen insensitivity.

AUTHOR: Langley E; Kempainen J A; Wilson E M

CORPORATE SOURCE: Laboratories for Reproductive Biology, University of North Carolina, Chapel Hill, North Carolina 27599, USA.

CONTRACT NUMBER: HD16910 (NICHD)  
IU54-HD35041 (NICHD)  
P30-HD18968 (NICHD)

SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1998 Jan 2) 273 (1)

92-101.

Journal code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199802  
ENTRY DATE: Entered STN: 19980217  
Last Updated on STN: 19980217  
Entered Medline: 19980203

AB Structural alignment of the human androgen receptor dimer was investigated by introducing steroid binding domain mutations that cause partial or complete androgen insensitivity into fusion proteins containing the full-length androgen receptor or the steroid binding domain. Most of the mutants had unchanged apparent equilibrium androgen binding affinity and increased dissociation rates of [3H]methyltrienolone and. . .

L2 ANSWER 4 OF 6 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED.  
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ACCESSION NUMBER: 95255569 EMBASE

DOCUMENT NUMBER: 1995255569

TITLE: The monomer-binding orphan receptor Rev-Erb represses transcription as a dimer on a novel direct repeat.

AUTHOR: Harding H.P.; Lazar M.A.

CORPORATE SOURCE: Univ. of Pennsylvania School of Med., Department of Medicine, 415 Curie Blvd., Philadelphia, PA 19104-6149, United States

SOURCE: Molecular and Cellular Biology, (1995) 15/9 (4791-4802).  
ISSN: 0270-7306 CODEN: MCEBD4

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Rev-Erb is an orphan nuclear receptor which binds as a monomer to the thyroid/retinoic acid receptor half-site AGGTCA flanked 5' by an A/T-rich sequence, referred to here as a Rev monomer site. Fusion of Rev-Erb to the DNA binding domain of yeast GAL4 strongly repressed basal transcription of a GAL4-luciferase reporter gene as. . . binding site selection strategy was devised to test the hypothesis that Rev-Erb may function on a different site as a dimer. This approach identified sequences containing two Rev monomer sites arranged as direct repeats with the AGGTCA motifs separated by 2. . . this repression, consistent with the GAL4 results. However, the Rev-DR2 specificity did not require the C terminus in vivo, since fusion of C-terminally truncated Rev-Erb to a heterologous transactivation domain created a transcriptional activator specific for Rev-DR2. In addition to idealized. . . as retinoic acid-induced transcription from a naturally occurring Rev-DR2 in the CRBPI gene. Thus, although Rev-Erb is distinguished from other thyroid/steroid receptor superfamily members by its ability to bind DNA as a monomer, it functions as a homodimer to repress transcription of. . .

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ACCESSION NUMBER: 94311345 EMBASE

DOCUMENT NUMBER: 1994311345

TITLE: Dimerization characteristics of the DNA- and steroid-binding domains of the androgen receptor.

AUTHOR: Nemoto T.; Ohara-Nemoto Y.; Shimazaki S.; Ota M.

CORPORATE SOURCE: Department of Biochemistry, Iwate Medical Univ. School Dentistry, Morioka, Iwate 020, Japan

SOURCE: Journal of Steroid Biochemistry and Molecular Biology,

(1994) 50/5-6 (225-233).  
ISSN: 0960-0760 CODEN: JSBBEZ

COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 003 Endocrinology  
029 Clinical Biochemistry

LANGUAGE: English  
SUMMARY LANGUAGE: English

AB The DNA-binding domain (DBD) of the androgen, mineralocorticoid, and glucocorticoid receptors and the steroid-binding domain (SBD) of the androgen receptor (AR) were expressed separately as fusion proteins with glutathione-S-transferase (GST) in *Escherichia coli*. Native polyacrylamide gel electrophoresis and gel exclusion HPLC demonstrated that the GST-ARDBD fusion protein was present as a dimer. On the other hand, the GST-ARSBD fusion protein formed a high-molecular weight oligomer, which seemed to be formed by two separate interactions, i.e. GST-GST and ARSBD-ARSBD between the fusion molecules. These findings strongly suggest that ARSBD has a potent ability to form a homodimer and that ARDBD does not... specifically interacted with the glucocorticoid response elements of the mouse mammary tumor virus long terminal repeat (GRE(MMTV)). Cleavage of the fusion protein by thrombin abolished the binding, while the nonspecific DNA-cellulose binding ability was retained. Therefore, the dimeric configuration of GST-ARDBD... apparent different in the binding affinity to these response elements was observed among the DBDs of androgen, mineralocorticoid and glucocorticoid receptors.

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ACCESSION NUMBER: 89126316 EMBASE  
DOCUMENT NUMBER: 1989126316  
TITLE: Cooperative binding of steroid hormone receptors contributes to transcriptional synergism at target enhancer elements.

AUTHOR: Tsai S.Y.; Tsai M.-J.; O'Malley B.W.  
CORPORATE SOURCE: Department of Cell Biology, Baylor College of Medicine, Houston, TX 77030, United States  
SOURCE: Cell, (1989) 57/3 (443-448).

ISSN: 0092-8674 CODEN: CELLB5  
COUNTRY: United States  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 003 Endocrinology  
029 Clinical Biochemistry

LANGUAGE: English  
SUMMARY LANGUAGE: English

AB We demonstrated previously that two molecules of steroid hormone receptor bound efficiently to a single hormone response element (GRE/PRE) of the tyrosine aminotransferase gene (Tsai et al., 1988). Here, we show that two tandemly linked GRE/PRES conferred progesterone inducibility synergistically to a heterologous TK-CAT fusion gene. Binding studies demonstrated that occupation of one GRE/PRE site by a progesterone receptor dimer increased the binding affinity of receptors for the second GRE/PRE site 100-fold. Thus, the observed synergistic induction of TK-CAT may result from cooperative binding of receptor dimers to the two GRE/PRE sites.

=> d his

(FILE 'HOME' ENTERED AT 08:05:05 ON 22 DEC 2003)

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 08:05:15 ON 22 DEC 2003

L1 9 S DIMER (S) FUSION (S) STEROID (S) RECEPTOR  
L2 6 DUP REM L1 (3 DUPLICATES REMOVED)

=> s dimer (s) fusion (s) nuclear (s) hormone (s) receptor  
L3 4 DIMER (S) FUSION (S) NUCLEAR (S) HORMONE (S) RECEPTOR

=> dup rem l3  
PROCESSING COMPLETED FOR L3  
L4 4 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 total ibib kwic

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ACCESSION NUMBER: 2001422932 EMBASE

TITLE: Domain structure of the NRIF3 family of coregulators  
suggests potential dual roles in transcriptional  
regulation.

AUTHOR: Li D.; Wang F.; Samuels H.H.

CORPORATE SOURCE: H.H. Samuels, Department of Pharmacology, Division of  
Clinical Endocrinology, New York Univ. School of Medicine,  
550 First Ave., New York, NY 10016, United States.  
herbert.samuels@med.nyu.edu

SOURCE: Molecular and Cellular Biology, (2001) 21/24 (8371-8384).  
Refs: 63

ISSN: 0270-7306 CODEN: MCEBD4

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB The identification of a novel coregulator for **nuclear hormone receptors**, designated NRIF3, was recently reported (D. Li et al., Mol. Cell. Biol. 19:7191-7202, 1999). Unlike most known coactivators, NRIF3 exhibits a distinct **receptor** specificity in interacting with and potentiating the activity of only TRs and RXRs but not other examined **nuclear receptors**. However, the molecular basis underlying such specificity is unclear. In this report, we extended our study of NRIF3-**receptor** interactions. Our results suggest a bivalent interaction model, where a single NRIF3 molecule utilizes both the C-terminal LXXIL (**receptor** -interacting domain 1 [RID1]) and the N-terminal LXXLL (RID2) modules to cooperatively interact with TR or RXR (presumably a **receptor dimer**), with the spacing between RID1 and RID2 playing an important role in influencing the affinity of the interactions. During the . . . 112), which is predicted to form a coiled-coil structure and contains a putative leucine zipper, like motif. By using Gal4 **fusion** constructs, we identified an autonomous transactivation domain (AD1) at the C terminus of NRIF3. Somewhat surprisingly, full-length NRIF3 fused to . . . additional isoforms due to alternative splicing. These two isoforms contain the same RepD1 region as NRIF3. Consistent with this, Gal4 **fusions** of these two isoforms were also found to repress transcription. Cotransfection of NRIF3 or its two isoforms did not relieve the transrepression function mediated by their corresponding Gal4 **fusion** proteins, suggesting that the repression involves a mechanism(s) other than the recruitment of a titratable corepressor. Interestingly, a single amino. . .

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ACCESSION NUMBER: 1999087786 EMBASE

TITLE: A functional DNA binding domain is required for growth  
hormone-induced nuclear accumulation of Stat5B.

AUTHOR: Herrington J.; Ruin L.; Luo G.; Yuo-Lee L.-Y.; Carter-Su C.

CORPORATE SOURCE: C. Carter-Su, Dept. of Physiology, Univ. of Michigan  
Medical School, 6804 Medical Science II, 1301 Catherine  
St., Ann Arbor, MI 48109-0622, United States.  
cartersu@umich.edu

SOURCE: Journal of Biological Chemistry, (19 Feb 1999) 274/8  
(5138-5145).

Refs: 49

ISSN: 0021-9258 CODEN: JBCHA3

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB . . . regulating the cellular distribution of STAT family transcription factors remain poorly understood. To identify regions of Stat5B required for ligand-induced nuclear accumulation, we constructed a cDNA encoding green fluorescent protein (GFP) fused to the N terminus of Stat5B and performed site-directed mutagenesis. When co-expressed with growth hormone (GH) receptor in COS-7 cells, GFP-Stat5B is tyrosylphosphorylated, forms dimers, and binds DNA in response to GH in a manner indistinguishable from untagged Stat5B. In multiple cell types, laser scanning confocal imaging of GFP-Stat5B co-expressed with GH receptor shows that GFP-Stat5B undergoes a rapid, dramatic accumulation in the nucleus upon GH stimulation. We introduced alanine substitutions in several regions of Stat5B and assayed for GH-dependent nuclear localization. Only the mutation that prevented binding to DNA (466VVVI469) abrogated GH-stimulated nuclear localization. This mutant fusion protein is tyrosyl-phosphorylated and dimerizes in response to GH. These results suggest that either high affinity binding to DNA contributes to nuclear accumulation of Stat5B or that this region is crucial for two functions, namely accumulation of Stat5B in the nucleus and DNA binding. Thus, we have identified a mutant Stat5 defective in nuclear localization despite its ability to be tyrosyl-phosphorylated and to dimerize.

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ACCESSION NUMBER: 1999079975 EMBASE

TITLE: Identification of a nuclear localization signal in  
activin/inhibin -(A) subunit; intranuclear -(A) in rat  
spermatogenic cells.

AUTHOR: Blauer M.; Huscagavel S.; Syvala H.; Tuohimaa P.; Ylikomi T.

CORPORATE SOURCE: M. Blauer, Department of Anatomy, Medical School,  
University of Tampere, FIN-33101 Tampere, Finland.  
Blauer@csc.fi

SOURCE: Biology of Reproduction, (1999) 60/3 (588-593).

Refs: 50

ISSN: 0006-3363 CODEN: BIREBV

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 002 Physiology

028 Urology and Nephrology

029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB Activin is a dimeric glucoprotein hormone that was initially characterized by its ability to stimulate pituitary FSH secretion and was subsequently recognized as a growth factor. . . of tissues. In the testis, activin has been implicated in the auto/paracrine regulation of spermatogenesis through its cognate cell membrane receptors on Sertoli and germ cells. In this study we provide evidence for intranuclear activin/inhibin -(A) subunit and show its distribution in the rat seminiferous epithelium. We have shown by transient expression in HeLa cells of .beta.-galactosidase fusion proteins that the .beta.(A)

subunit precursor contains a functional **nuclear** localization signal within the lysine-rich sequence corresponding to amino acids 231-244. In all stages of the rat seminiferous epithelial cycle, an intense immunohistochemical staining of **nuclear .beta.(A)** was demonstrated in intermediate or type B spermatogonia or primary spermatocytes in their initial stages of the first meiotic. . . cytoplasm, suggesting disposal of **.beta.(A)** before spermatozoal maturation. Immunoblot analysis of a protein extract from isolated testicular nuclei revealed a **nuclear .beta.(A)** species with a molecular mass of approximately 24 kDa, which is more than 1.5 times that of the mature **.beta.(A)** subunit present in activin **dimers**. These results suggest that activin/inhibin **.beta.(A)** may elicit its biological functions through two parallel signal transduction pathways, one involving the dimeric molecule and cell surface **receptors** and the other an alternately processed **.beta.(A)** sequence acting directly within the nucleus. According to our immunohistochemical data, **.beta.(A)** may play a significant role in the regulation of **nuclear** functions during meiosis and spermiogenesis.

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on STN

ACCESSION NUMBER: 1998336916 EMBASE  
TITLE: Studies of dehydroepiandrosterone (DHEA) with the human estrogen receptor in yeast.  
AUTHOR: Nephew K.P.; Sheeler C.Q.; Dudley M.D.; Gordon S.; Nayfield S.G.; Khan S.A.  
CORPORATE SOURCE: K.P. Nephew, Medical Sciences Program, Indiana University School Medicine, 302 Jordon Hall, Bloomington, IN 47405-4401, United States. knephew@indiana.edu  
SOURCE: Molecular and Cellular Endocrinology, (25 Aug 1998) 143/1-2 (133-142).  
Refs: 72  
ISSN: 0303-7207 CODEN: MCEND6  
PUBLISHER IDENT.: S 0303-7207(98)00128-2  
COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 003 Endocrinology  
029 Clinical Biochemistry  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB . . . as a biosynthetic precursor to testosterone and 17.beta.-estradiol. Despite the fact that it is one of the most abundant steroid **hormones** in circulation, the physiological role of DHEA in humans remains unclear. The action of DHEA itself, such as its interactions with **receptors** and **nuclear** transcription factors, is not well understood, and a specific DHEA **receptor** has yet to be identified. Although the activity of DHEA can be due to its metabolism into androgens and estrogens, DHEA has been shown to interact with the androgen **receptor** and the estrogen **receptor** (ER) in vitro. We demonstrate in this study that DHEA (3.beta.-Hydroxy-5.alpha.-androstan-17-one) inhibits 17.beta.-estradiol (E2) binding to its **receptor** in vivo in yeast. DHEA stimulates human ER dimerization in yeast, as determined by ER fusion protein interactions, GAL4 reconstitution and subsequent measurement of increased .beta.-galactosidase activity. DHEA causes an increase in estrogen response element-dependent .beta.-galactosidase activity, demonstrating that the ER **dimer** induced by DHEA is transcriptionally active, but at a concentration of DHEA about 1000 times greater than E2. Inclusion of the **nuclear receptor** co-activator RIP140 in the yeast enhances ER transactivation by DHEA or E2 in a ligand-dependent manner; moreover, only in the presence of RIP140 is DHEA able to stimulate .beta.-galactosidase activity to levels similar to those achieved by E2. Ligand-**receptor** interaction for other C19-steroids was also examined. While 5-androstene-3.beta., 17.beta.-diol (ADIOL) displayed



estrogenic activity in this system, 4-androstene-17-dione  
(androstenedione) and. . .